Sheet 1 of 13
Inventor Gary M. Schneider
System and Method For Developing a Farm...
Serial No. 09/934,257 Filed: Aug. 21, 2001
Jeffrey A. Pine, (312) 673-0360 25127

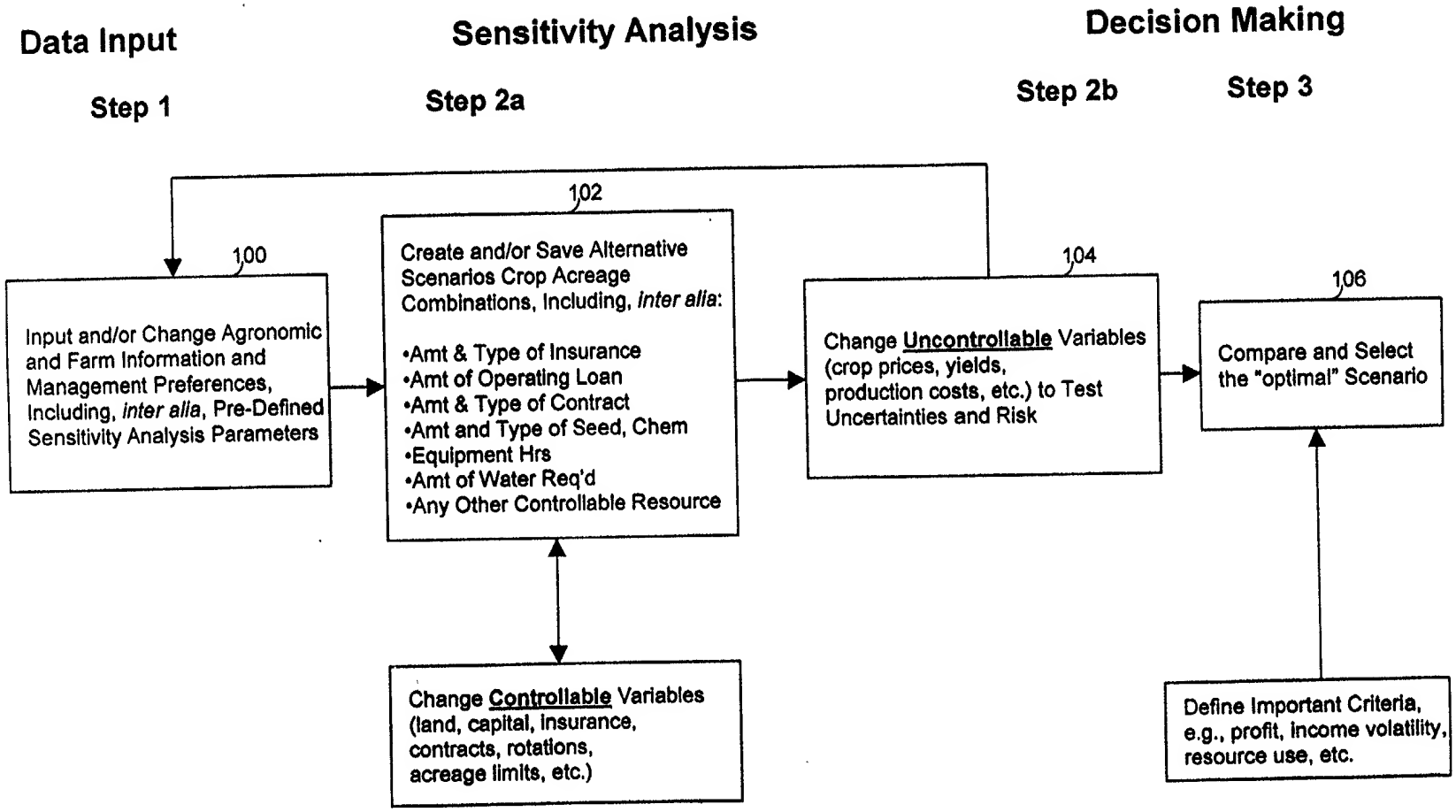


FIGURE 1

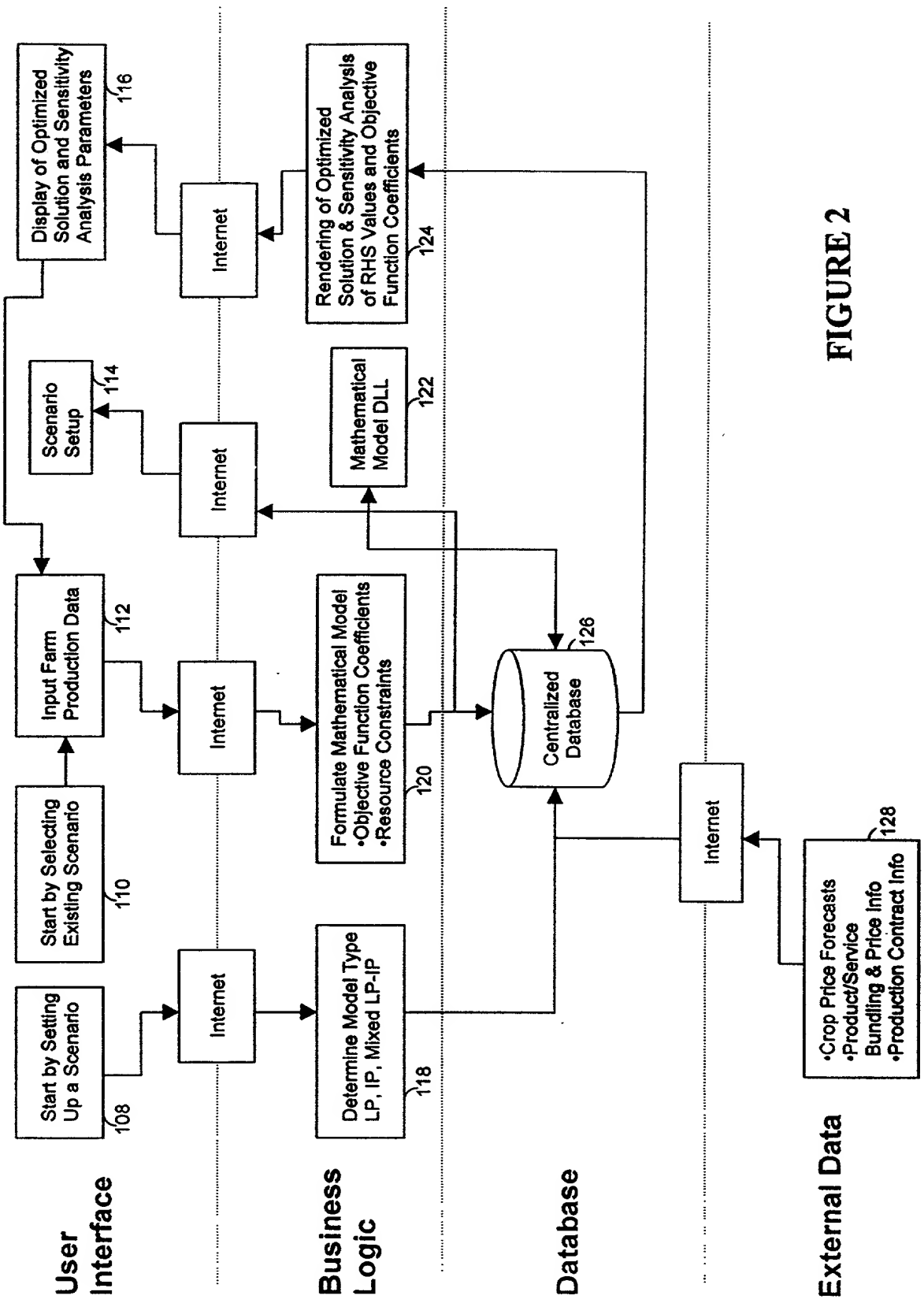

User Interface
Business Logic
Database
External Data
Start by Setting Up a Scenario
108
Start by Selecting Existing Scenario
110
Input Farm Production Data
112
Scenario Setup
114
Display of Optimized Solution and Sensitivity Analysis Parameters
116
Internet
Internet
Internet
Internet
Internet
Internet
Determine Model Type LP, IP, Mixed LP-IP
118
Formulate Mathematical Model
•Objective Function Coefficients
•Resource Constraints
120
Mathematical Model DLL
122
Rendering of Optimized Solution & Sensitivity Analysis of RHS Values and Objective Function Coefficients
124
Centralized Database
126
•Crop Price Forecasts
•Product/Service Bundling & Price Info
•Production Contract Info
128

FIGURE 2

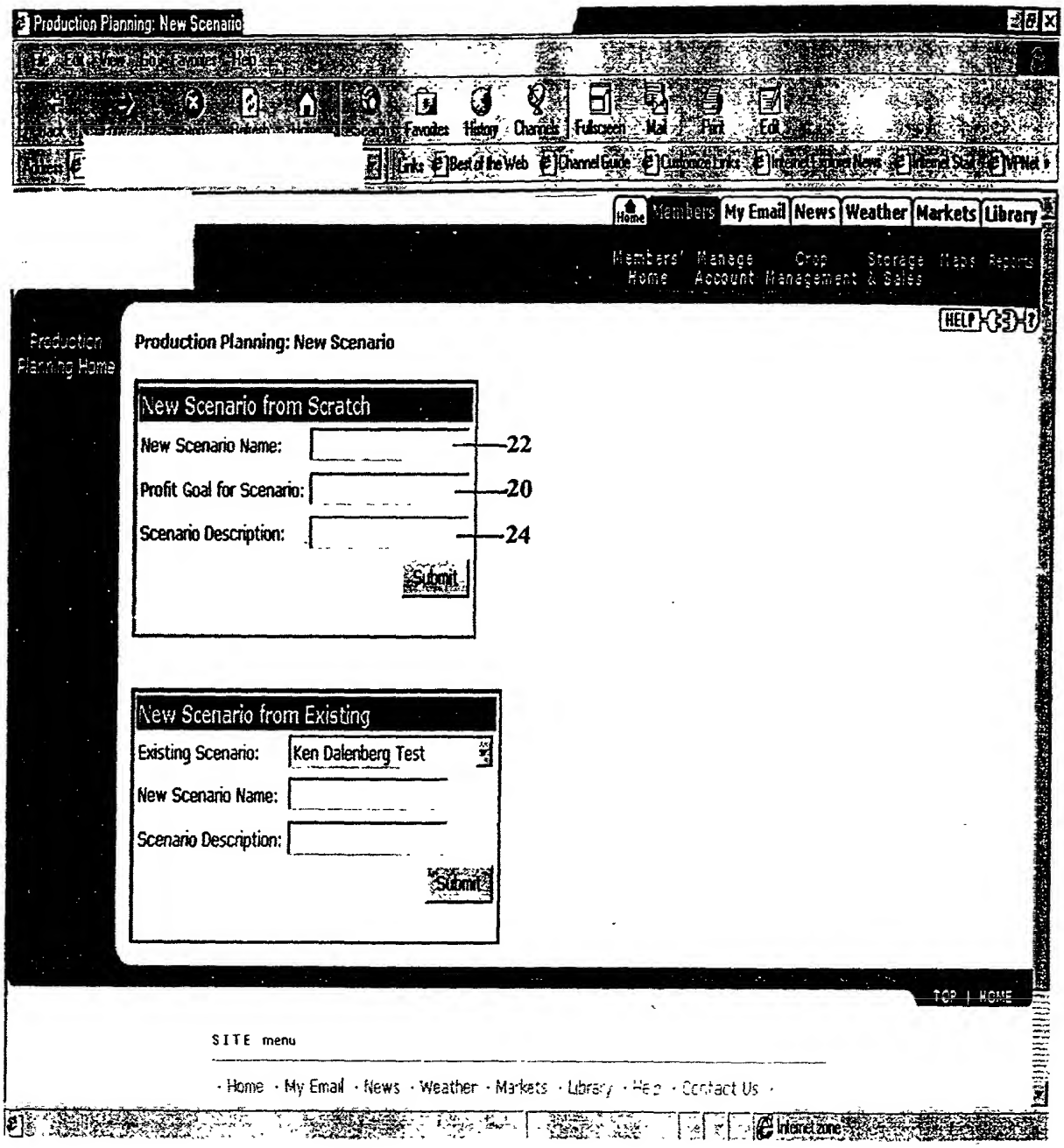

Production Planning: New Scenario
Favorites
History
Channels
Fullscreen
Mail
Print
Edit
Links
Best of the Web
Channel Guide
Home
Members
My Email
News
Weather
Markets
Library
Members' Home
Manage Account
Crop Management
Storage & Sales
Maps
Reports
HELP
Production Planning Home
Production Planning: New Scenario
New Scenario from Scratch
New Scenario Name:
22
Profit Goal for Scenario:
20
Scenario Description:
24
Submit
New Scenario from Existing
Existing Scenario:
Ken Dalenberg Test
New Scenario Name:
Scenario Description:
Submit
TOP | HOME
SITE menu
· Home · My Email · News · Weather · Markets · Library · Help · Contact Us ·
Internet zone

FIGURE 3

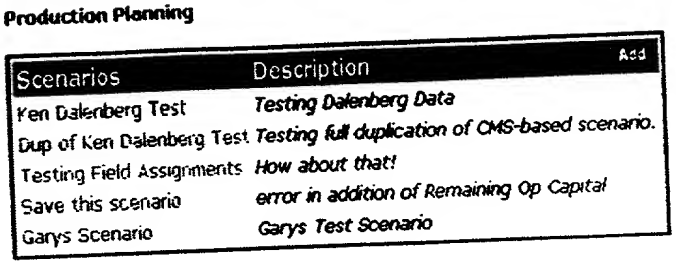


FIGURE 4

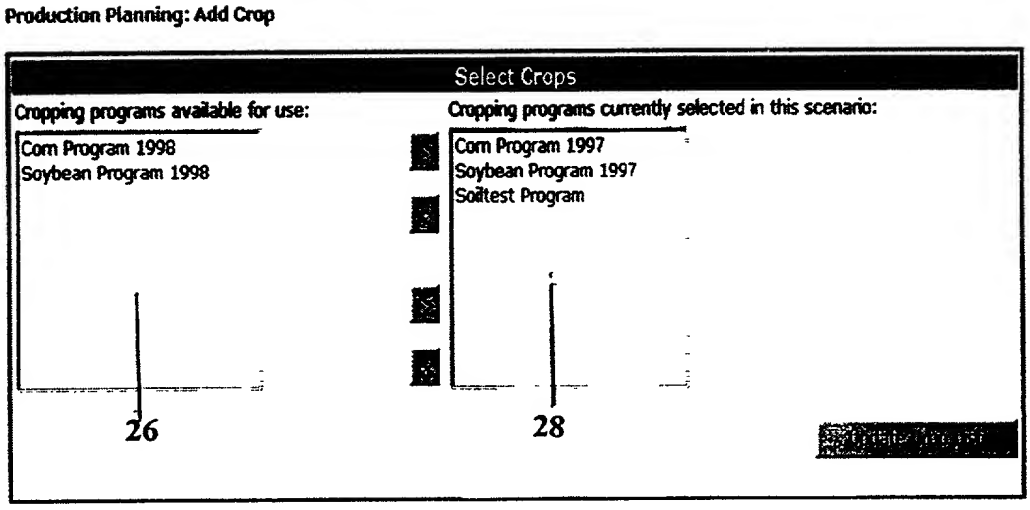


FIGURE 5

Production Planning: Add Field

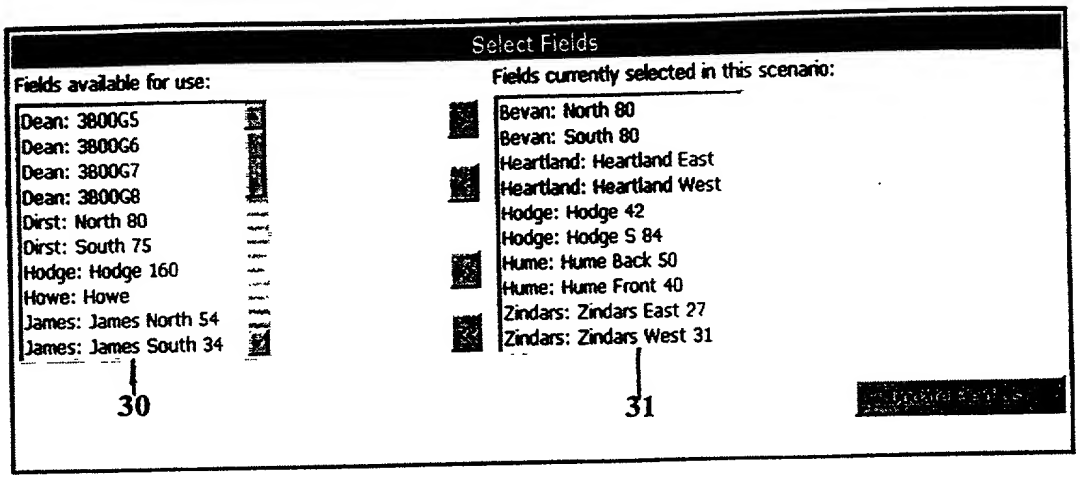


FIGURE 6

Production Planning: Edit Crop-Field Assignments

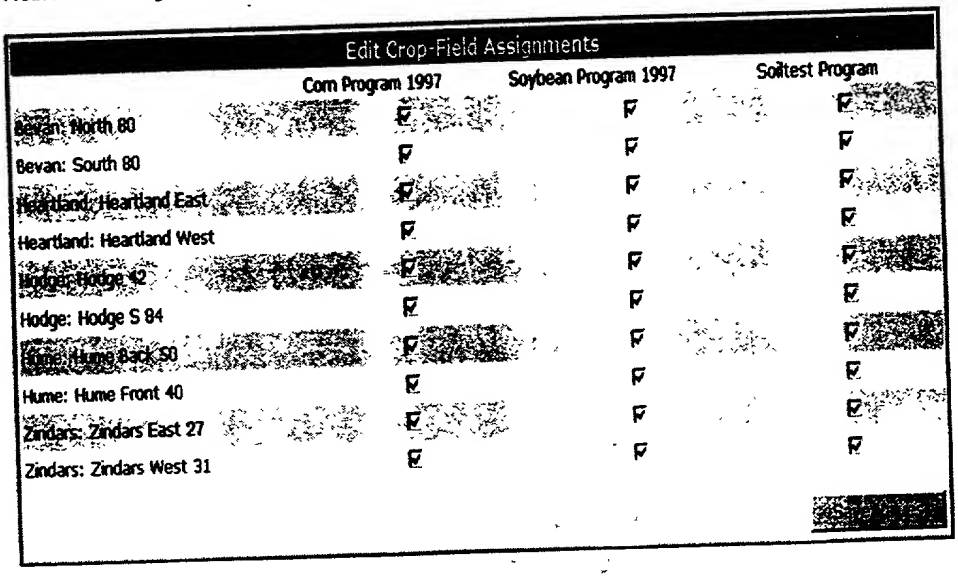


FIGURE 7

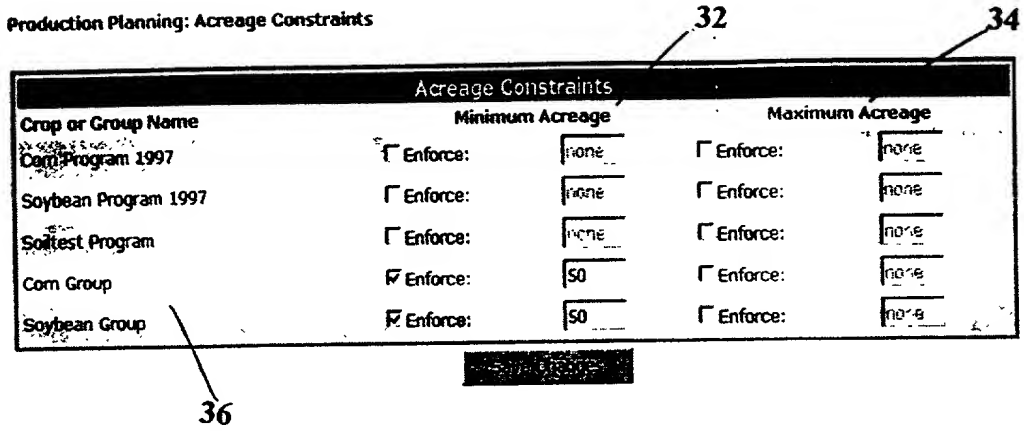


FIGURE 8

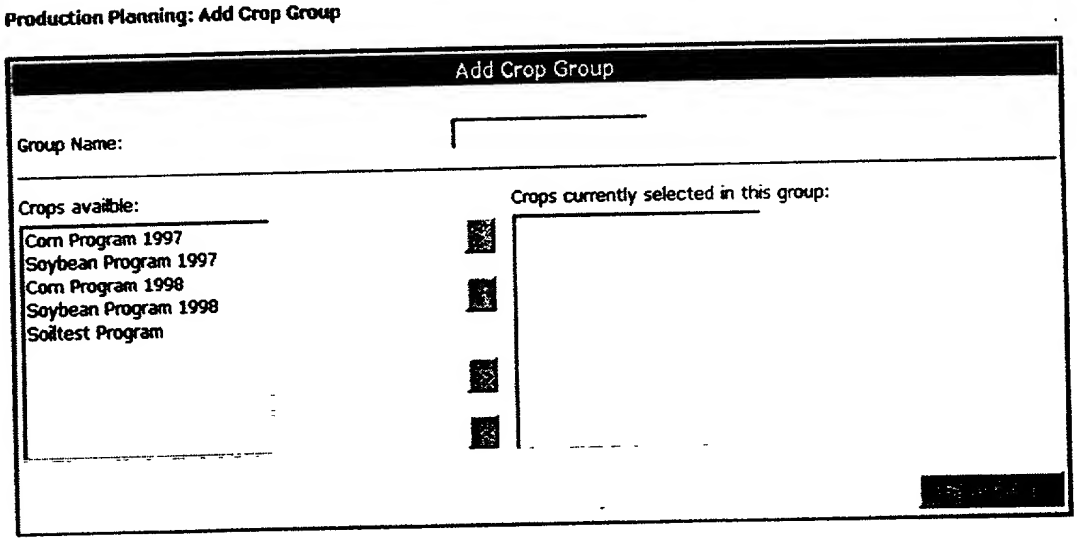


FIGURE 9

Production Planning: Add Contract

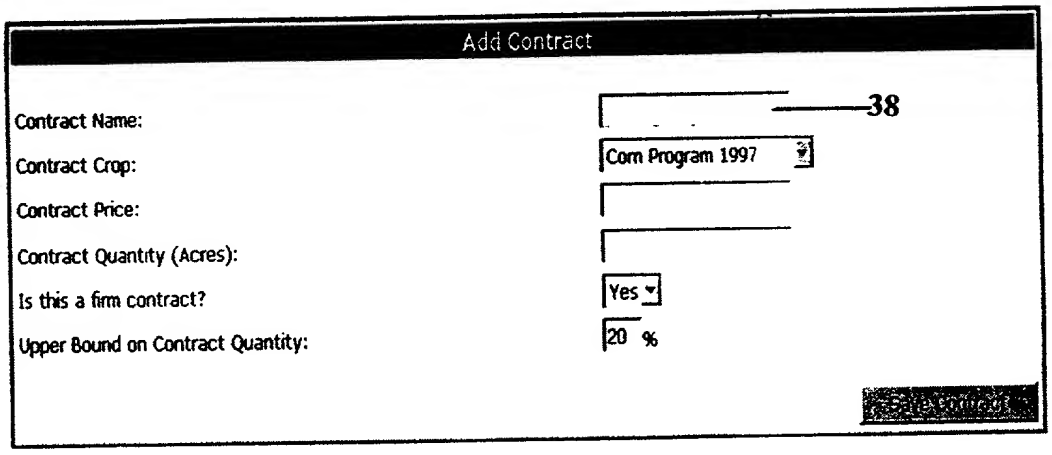


FIGURE 10

Production Planning: Add Resource

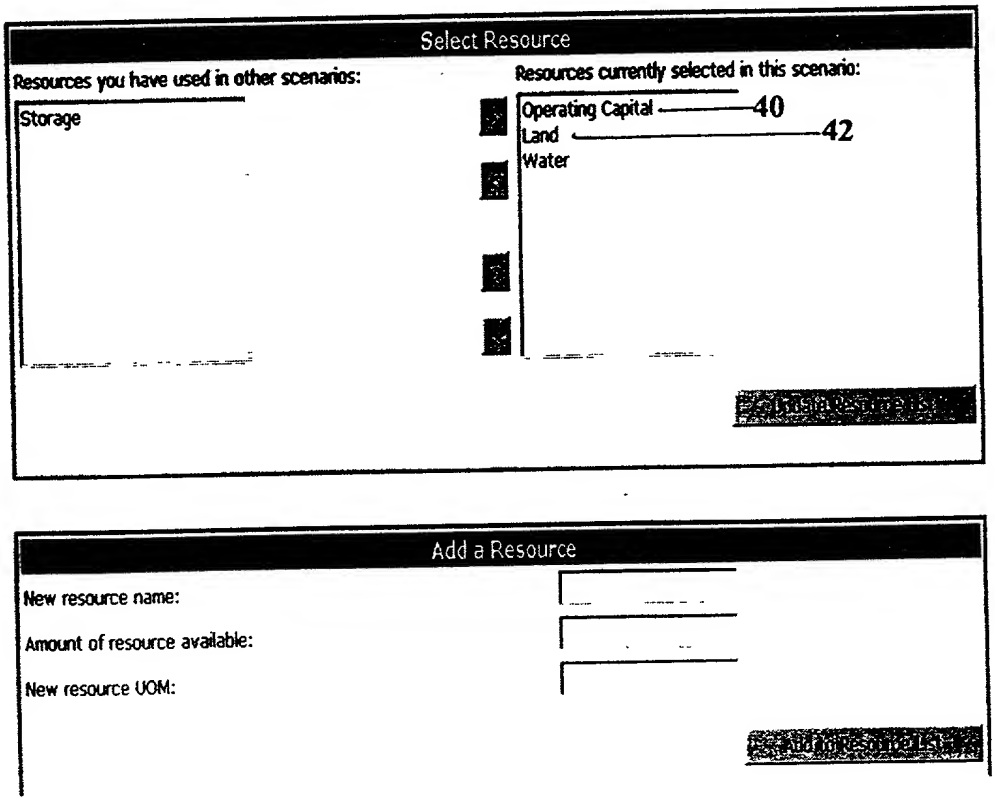


FIGURE 11

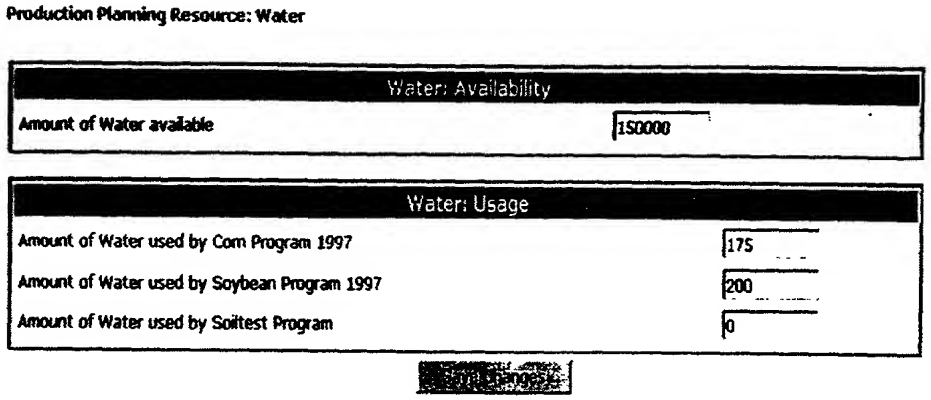


FIGURE 12

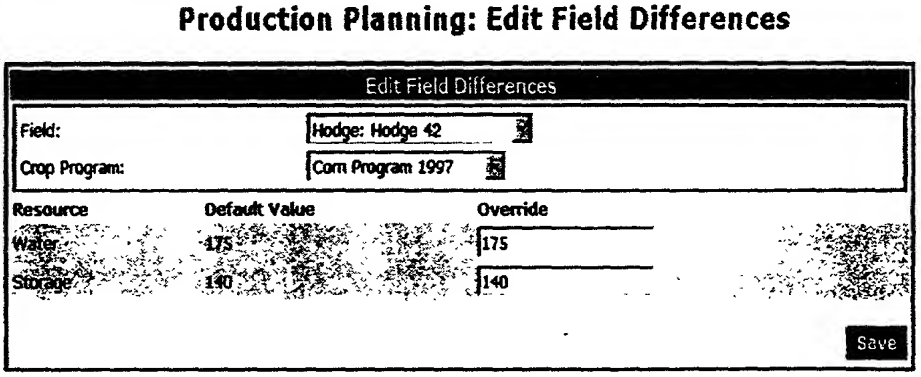


FIGURE 13

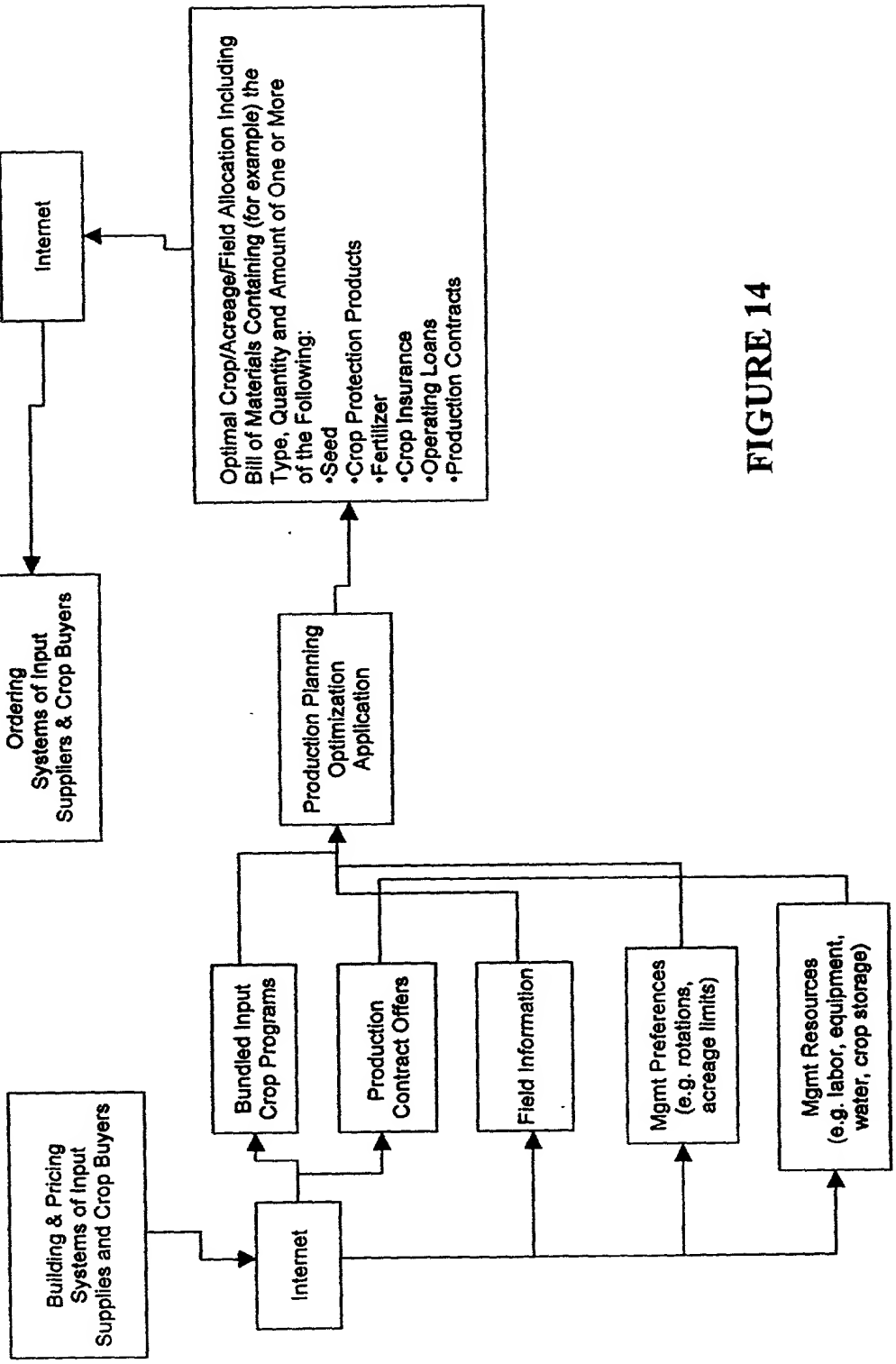

Building & Pricing Systems of Input Supplies and Crop Buyers
Internet
Bundled Input Crop Programs
Production Contract Offers
Field Information
Mgmt Preferences (e.g. rotations, acreage limits)
Mgmt Resources (e.g. labor, equipment, water, crop storage)
Production Planning Optimization Application
Optimal Crop/Acreage/Field Allocation Including Bill of Materials Containing (for example) the Type, Quantity and Amount of One or More of the Following:
•Seed
•Crop Protection Products
•Fertilizer
•Crop Insurance
•Operating Loans
•Production Contracts
Internet
Ordering Systems of Input Suppliers & Crop Buyers

FIGURE 14

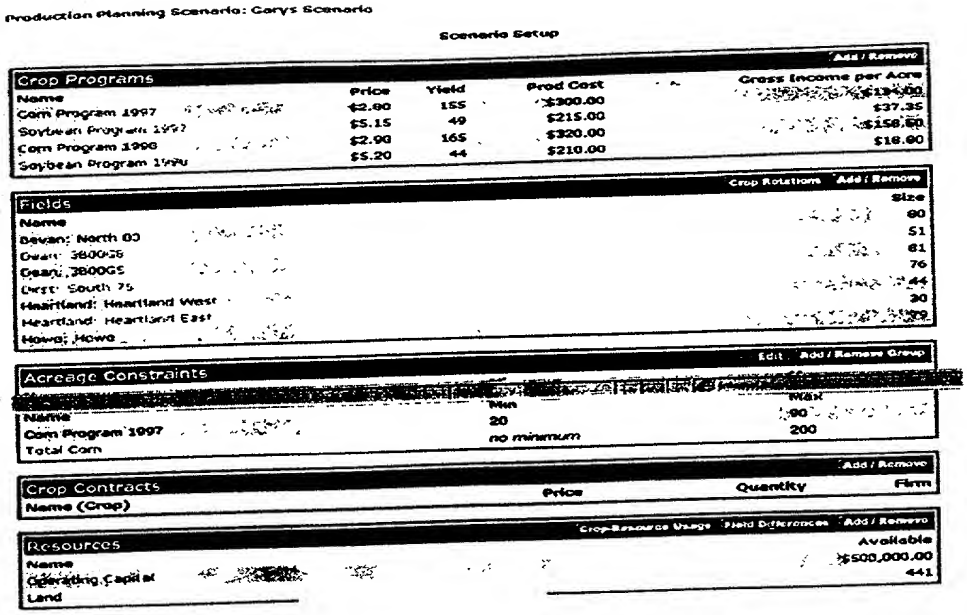


FIGURE 15

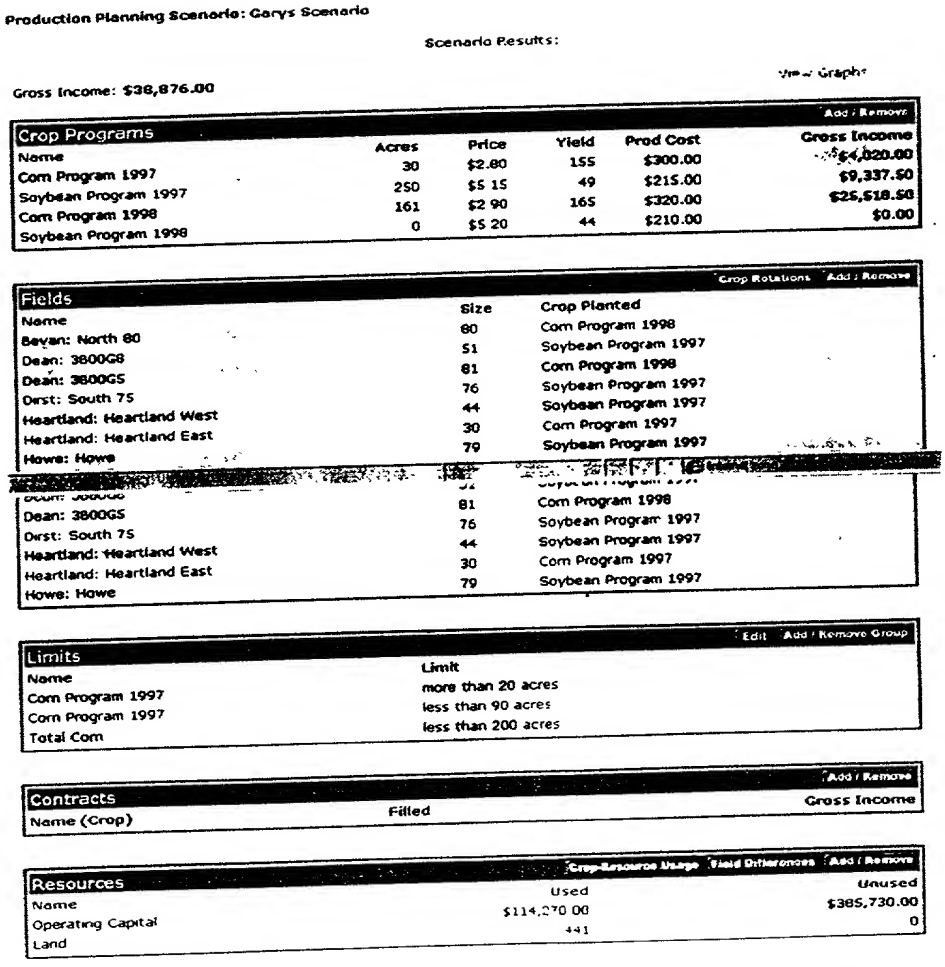


FIGURE 16

Production Planning Scenario: Garys Scenario

Scenario Results:

View Text

Gross Income: $38,876.00

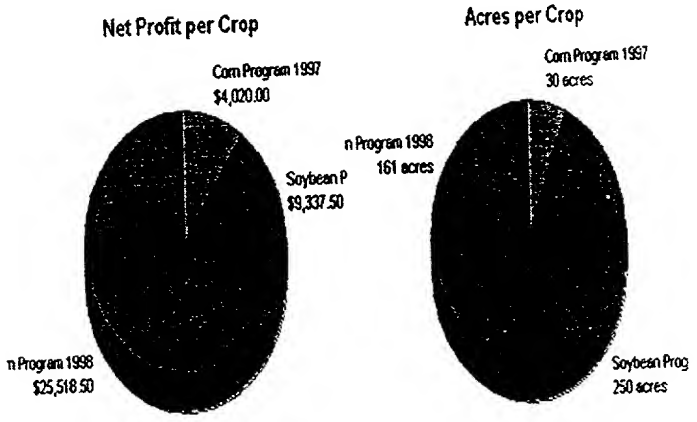


FIGURE 17

Resources

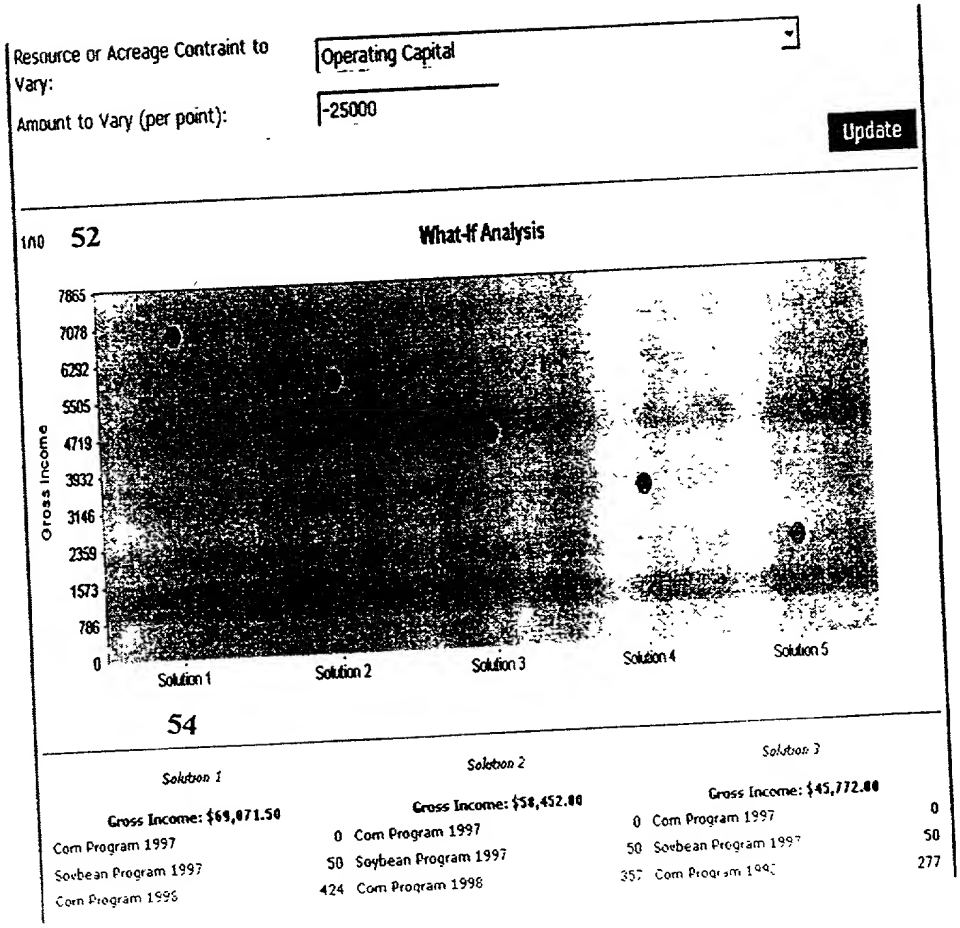
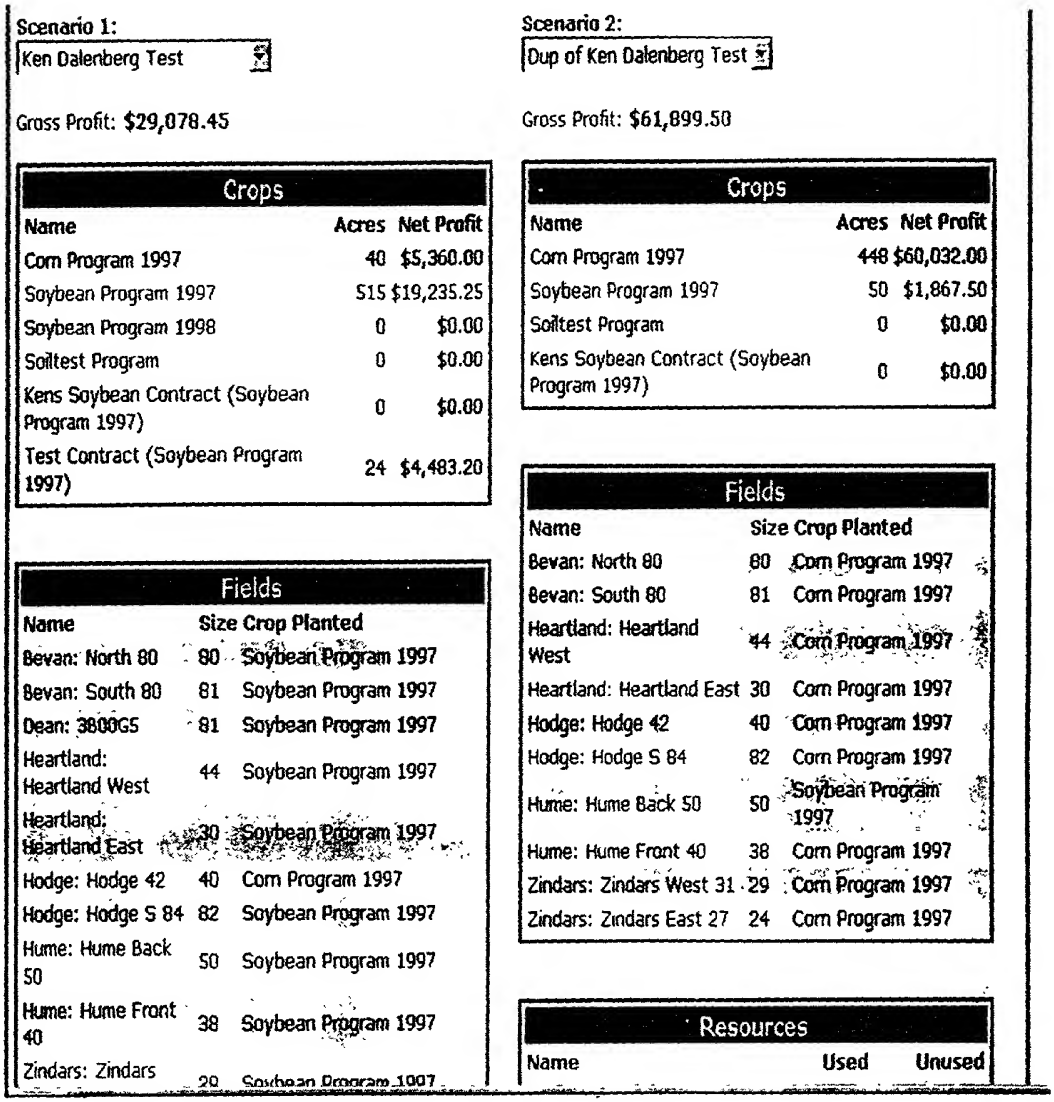


FIGURE 18



Scenario 1: Ken Dalenberg Test

Gross Profit: $29,078.45

Crops

Name	Acres	Net Profit
Corn Program 1997	40	$5,360.00
Soybean Program 1997	515	$19,235.25
Soybean Program 1998	0	$0.00
Soiltest Program	0	$0.00
Kens Soybean Contract (Soybean Program 1997)	0	$0.00
Test Contract (Soybean Program 1997)	24	$4,483.20

Fields

Name	Size	Crop Planted
Bevan: North 80	80	Soybean Program 1997
Bevan: South 80	81	Soybean Program 1997
Dean: 3800G5	81	Soybean Program 1997
Heartland: Heartland West	44	Soybean Program 1997
Heartland: Heartland East	30	Soybean Program 1997
Hodge: Hodge 42	40	Corn Program 1997
Hodge: Hodge S 84	82	Soybean Program 1997
Hume: Hume Back 50	50	Soybean Program 1997
Hume: Hume Front 40	38	Soybean Program 1997
Zindars: Zindars	29	Soybean Program 1997

Scenario 2: Dup of Ken Dalenberg Test

Gross Profit: $61,899.50

Crops

Name	Acres	Net Profit
Corn Program 1997	448	$60,032.00
Soybean Program 1997	50	$1,867.50
Soiltest Program	0	$0.00
Kens Soybean Contract (Soybean Program 1997)	0	$0.00

Fields

Name	Size	Crop Planted
Bevan: North 80	80	Corn Program 1997
Bevan: South 80	81	Corn Program 1997
Heartland: Heartland West	44	Corn Program 1997
Heartland: Heartland East	30	Corn Program 1997
Hodge: Hodge 42	40	Corn Program 1997
Hodge: Hodge S 84	82	Corn Program 1997
Hume: Hume Back 50	50	Soybean Program 1997
Hume: Hume Front 40	38	Corn Program 1997
Zindars: Zindars West 31	29	Corn Program 1997
Zindars: Zindars East 27	24	Corn Program 1997

Resources

Name	Used	Unused

FIGURE 19

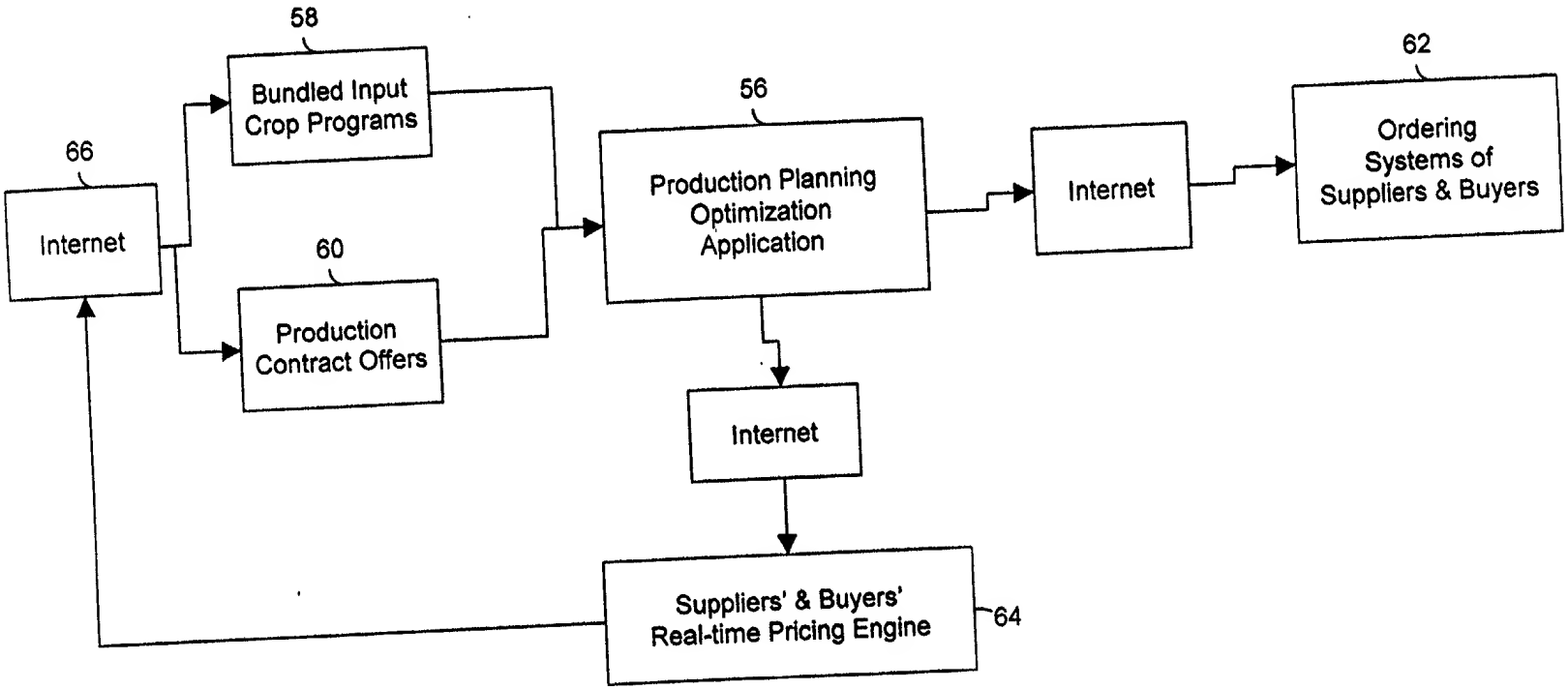

58
Bundled Input Crop Programs
66
Internet
60
Production Contract Offers
56
Production Planning Optimization Application
Internet
62
Ordering Systems of Suppliers & Buyers
Internet
Suppliers' & Buyers' Real-time Pricing Engine
64

FIGURE 20